

Question	Your response
<p data-bbox="188 360 738 427">Question 1: Do you agree with our proposed changes to the ACI/blocking procedures?</p>	<p data-bbox="794 360 1334 495">We broadly agree with the proposals, which respond to issues uncovered during the implementation of the Small Scale DAB Trial, but suggest some refinements.</p> <p data-bbox="794 539 1358 819">OFCOM recognises that historically the construction of new sites has mainly been co-ordinated by a single provider. This new process must be sufficiently robust to handle a more competitive environment, where an existing operator may wish to block or delay a new site for reasons other than technical impact.</p> <p data-bbox="794 864 1369 1245">The distinction between Amber and Red is subjective. It should be made clearer if there is a single determination made of the site status – by OFCOM or by the proposer – or if each operator can make their own determination. If the latter, it must be explained how disputes over site classifications should be resolved and in what time frame. It should not be possible for an operator to block the process by determining that a site is a Red proposal and refusing to handle it.</p> <p data-bbox="794 1290 1345 1491">The definition of Red includes reference to densely populated areas and main roads. This seems unnecessary to include. The key requirement is to minimise reception disruption for listeners, regardless of location or environment.</p> <p data-bbox="794 1536 1369 1816">The definition of Red should be made more precise in terms of percentage of population / homes / road length expected to lose service from one or more other multiplexes. This should be set as the highest tolerable threshold of disruption, recognising that legitimate multiplex operators will attempt to minimise interference to other operators.</p> <p data-bbox="794 1861 1358 2029">Where a site is brought on-line for testing purposes, the sensitivity of the apparatus used for drive testing of signals from on-test sites should be specified (within reasonable tolerances) to avoid disputes over</p>

	<p>measurements. The refusal or inability of other operators to take part in drive tests should not block the process.</p> <p>We welcome the pragmatic approach to allow short duration transmissions from the proposed site to allow for real-world testing. Where low powers are in use, computer models can't accurately take into account attenuation from factors like localised building shielding.</p>
<p>Question 2: Do you have any comments on the adoption of the new ETSI mask characteristic and on the potential use of the non-critical spectrum mask?</p>	<p>We welcome these proposals to align the masks with the ETSI standards.</p> <p>Use of the non-critical (uncritical) mask should be considered as the standard for new, lower powered, multiplexes. It is easier to achieve the non-critical mask without expensive and sensitive filtering equipment, and the low radiated power of the transmissions means that unwanted signals are likely to be insignificant. In conjunction with the ACI and blocking procedures, there is adequate protection for listeners and other operators.</p> <p>The existing Technical Code refers to Very Low Power Repeaters, which are often used to re-broadcast DAB signals into shops so that receivers can function properly for prospective buyers. The current code permits their use between 10B and 12D (the historically allocated DAB blocks). As new multiplexes are likely to be licenced into other blocks, this section should be reviewed accordingly.</p> <p>(There appear to be an error in Table 2, defining the non-critical mask characteristics. The first and second frequency offset points are shown as ± 0.97, where the first frequency offset point should be ± 0.77).</p>
<p>Question 3: Do you agree with our proposed changes on DAB+ audio encoding?</p>	<p>We agree that operators should be able offer DAB or DAB+ to service providers on an equitable basis. DAB+ is more spectrally efficient and should reduce the barrier of entry for smaller broadcasters wanting to transition from analogue to digital.</p>
<p>Question 4: Do you agree with our other proposed revisions to the Digital Radio Technical Code outlined in Section 6 of this document? Do you have any views on</p>	<p>We mainly agree with the proposals in Section 6 but have comments on three elements.</p> <p>FIC Repetition Rates</p>

alternative models for dealing with the administration of Sid and TII codes?

OFCOM should not seek to impose tighter requirements than the prevailing standards. The standards recognise that there are preferred repetition rates, but also many likely scenarios where they cannot be met. Manufacturers are aware to be tolerant of scenarios where the recommended repetition rates are not met. It is right for OFCOM to draw licensees attention to the recommended rates, but not to penalise them for not achieving them.

Error Protection

It is not clear why other error-protection rates should not be possible for DAB+; for example, EEP-1A, EEP-2A, EEP-3B, EEP-2B and EEP-1B are all applicable and should give error protection equivalent or better than EEP-3A.

Sid Codes

The proposal to re-use Sid codes is entirely contrary to the DAB standards and seems unnecessary.

Although there is an inferred behaviour between identical Sid and FM-RDS PI codes, there no other inferred behaviour that would prevent nearly the entire 16^3 code range (4,096) codes from being allocated. As Hard Linking and Soft Linking is a mandatory component of all new Digital Tick compliant mobile receivers, any required (or not required) signalling between DAB and FM services can be explicitly defined. We do not have a view on who should be responsible for managing the available code ranges, other than they should have the ability to manage and allocate codes individually, rather than grant “blocks” of codes to broadcasters or define “algorithmic allocations”, which have proven to be inefficient.

Question 5: Do you agree with our other proposed revisions to the Technical Policy Guidance for DAB Multiplex Licensees document outlined in Section 7 of this document?

We generally agree that the current structure should not automatically apply to new multiplexes.

The Small Scale DAB Trial has shown that the regulatory framework has to be responsive to a dynamic and fast moving radio environment, where service providers and multiplex services change frequently, suddenly and not always in an orderly fashion.